

C L A I M S

1. Control circuit for control of a media heating device
(12, 22) of a dental handpiece (1)
5 having a heating current circuit (20) in which there
is arranged a switch (S1, S2), which can be actuated
by hand, for the activation of the heating device (12,
22),
characterized by
10 a further controllable switch element (V1, V2)
arranged in the heating current circuit (20), which
switch element can be set in dependence upon an
external control signal (VCC, V_{on}) into a conducting
or non-conducting condition.
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2. Control circuit according to claim 1,
characterized in that
the heating current circuit (20) is connected to an
a.c. voltage source (AC0, AC1) and there are provided
20 two controllable switch elements (V1, V2) which are
arranged anti-parallel in the heating current circuit
(20).
3. Control circuit according to claim 1 or 2,
25 characterized in that,
the external control signal (VCC, V_{on}) is delivered to
the controllable switch element or elements (V1, V2)
via one or two optotriacs (U1, U2).
- 30 4. Control circuit according to any of claims 1 to 3,
characterized in that,
the controllable switch element or switch elements is
or are thyristors (V1, V2).
- 35 5. Control circuit according to any preceding claim,
characterized in that,

there are arranged in the heating current circuit (20), in parallel to one another, two switches (S1, S2) which can be actuated by hand, the one switch (S1) being provided for activation of the air media heating and the other switch (S2) for activation of the water media heating of the dental handpiece (1).

6. Control circuit according to any preceding claim, characterized in that,
upon an actuation of the switch or switches (S1, S2), at the same time a valve for the corresponding medium is opened.
7. Control circuit according to any preceding claim, characterized in that,
there is provided further an illumination device (LA) for the dental handpiece (1), which upon an activation of the heating device (12, 22) is likewise activated.
8. Control circuit according to claim 7, characterized in that,
after the deactivation of the heating device (12, 22) the illumination device (LA) remains active for a predetermined persistence time.
9. Control circuit according to claim 7 or 8, characterized in that,
the illumination device has a control block (23), which, in dependence upon an input signal, controls a light supply unit (24) for operating a light source (LA).
10. Control circuit according to claim 9, characterized in that,

as input signal there is delivered to the control block (23) a voltage drop within the heating current circuit (20).

- 5 11. Control circuit according to claim 10,
characterized in that,
the voltage drop within the heating current circuit
(20) is delivered to the control block (23) via an
opto-coupler (U3).
- 10 12. Control circuit according to any of claims 7 to 11,
characterized in that,
the heating current circuit (20) and the illumination
device are connected to a common current supply source
15 (AC0, AC1).
13. Control circuit according to claim 12,
characterized in that,
the current supply source (AC0, AC1) issues an a.c.
20 voltage, a rectifier (21) being connected upstream of
the illumination device.
14. Dental handpiece having a heating device for heating
the air and/or water supply,
25 characterized by
a control circuit in accordance with any preceding
claim.
15. Dental handpiece according to claim 14,
30 characterized in that,
it is a dental spray handpiece (1).
16. Dental spray handpiece (1) having a heating device
(12, 22), which can be switched on and switched off,
35 for the through-flowing medium/media,
characterized in that,

the heating device (12, 22) can be deactivated when the or at least one of the media is intended for the purpose of cleaning and/or disinfecting the spray handpiece (1).

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17. Dental spray handpiece according to claim 16, characterized in that, the heating device (12, 22) can be deactivated via an external signal (VCC, V_{on}).

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